

Message

From: Buckley, Timothy [Buckley.Timothy@epa.gov]
Sent: 9/21/2017 7:35:54 PM
To: Gillespie, Andrew [Gillespie.Andrew@epa.gov]; Strynar, Mark [Strynar.Mark@epa.gov]
Subject: RE: potential PFAS bioassay project - cape Fear River

I think that we should looking across the full range (which at this point in time, includes at most 16 specific PFAS).

Tim

Timothy J. Buckley, PhD
Director of the Exposure Methods & Measurements Division
National Exposure Research Laboratory
109 TW Alexander Drive
Research Triangle Park, NC 27711

Email: buckley.timothy@epa.gov
URL: <http://www.epa.gov/heasd/staff/buckley.html>
Phone: (919) 541-2454 (O); FAX: -0239

Ex. 6 Personal Privacy (PP) (b)(6)

From: Gillespie, Andrew
Sent: Thursday, September 21, 2017 3:33 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Thanks, that clarifies.

Thanks, I have the GenX data – Tim sent it. I am also trying to assemble some of the other PFC concentrations – I assume (maybe incorrectly?) that the focus of the bioassays is on looking at the whole mixture, not just GenX, so we need to understand the full range of all PFCs in order to select samples that span the full range of mixture diversity.

Does that make sense, or should GenX alone drive the choice of samples?

Andrew J. R. Gillespie, Ph. D.
Associate Director
US EPA/ORD/NERL

From: Strynar, Mark
Sent: Thursday, September 21, 2017 3:27 PM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>; McMillan, Larry - RTP <McMillan.Larry-RTP@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

After week #5 NCDEQ started sampling the Chemours outfall 002 daily (M-F) giving us 5 samples. See the attached Word doc.

<< File: NC DEQ GenX_results week6 and 7 report.docx >>

We have the data for Weeks 1-7 for GenX only summarized in each biweekly report summary.

I am attaching the rest here.

Mark

<< File: NC DEQ GenX_results report.docx >> << File: NC DEQ GenX_results4_5 report07262017.docx >>

From: Gillespie, Andrew

Sent: Thursday, September 21, 2017 12:58 PM

To: McMillan, Larry - RTP <McMillan.Larry-RTP@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>

Cc: McCord, James <mccord.james@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>

Subject: RE: potential PFAS bioassay project - cape Fear River

Importance: High

Ex. 5 Deliberative Process (DP)

Thanks, Andy

Andrew J. R. Gillespie, Ph. D.

Associate Director

US EPA/ORD/NERL

From: McMillan, Larry - RTP

Sent: Thursday, September 21, 2017 11:02 AM

To: Strynar, Mark <Strynar.Mark@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>

Cc: McCord, James <mccord.james@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>

Subject: RE: potential PFAS bioassay project - cape Fear River

Hi Andrew,

Please see attached spreadsheet of the NCDEQ Cape Fears water sample extracts volumes in ml.

Larry McMillan
SEE Scientist IV
USEPA-NERL-EMAB
Voice 919-541-5657
Fax 919-541-0905
MD E-205-04

From: Strynar, Mark
Sent: Wednesday, September 20, 2017 2:07 PM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; McMillan, Larry - RTP <McMillan.Larry-RTP@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Thanks Andy.
Mark

From: Gillespie, Andrew
Sent: Wednesday, September 20, 2017 1:06 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; McMillan, Larry - RTP <McMillan.Larry-RTP@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Attached, thanks, I think I know the sites (rows) now, please correct the dates (columns) as needed, and put the number of samples and total volume in each cell.

Thanks, Andy

Andrew J. R. Gillespie, Ph. D.
Associate Director
US EPA/ORD/NERL

From: Strynar, Mark
Sent: Wednesday, September 20, 2017 1:02 PM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; McMillan, Larry - RTP <McMillan.Larry-RTP@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Andy,

I have asked Larry McMillan to do this for us today. I seem to recall you sent an Excel spreadsheet to begin populating. I can't seem to find it. Can you send it on to Larry?

Thanks,

Mark

From: Gillespie, Andrew
Sent: Sunday, September 17, 2017 9:30 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Hey Mark, if it will help I can come down to your lab or sample storage room or whatever on Monday and count them myself... just point me in the right direction. Seriously... let me know how I can help.

We can't go any further on designing an efficient bioassay study until we know the set of available samples. No pressure...

Thanks, Andy

From: Gillespie, Andrew
Sent: Tuesday, September 12, 2017 4:34 PM
To: Strynar, Mark <strynar.mark@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

OK thanks. Here is a revised spreadsheet with the correct data from the NC DEP table for site locations and dates, please check and change if I got it wrong. Use this one to summarize. Add rows and columns if needed.

<< File: CFR sample availability.xlsx >>

When you fill in the spreadsheet, please include the unconcentrated samples from August and May – number of samples, total volume. I will include in the design consideration.

Thanks, Andy

From: Strynar, Mark
Sent: Tuesday, September 12, 2017 4:10 PM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

We will get to this as soon as we can.

Until then here is a map link from NC DEQ for sampling sites. <https://deq.nc.gov/news/hot-topics/genx-investigation/genx-sampling-sites>

And one for the full GenX investigation <https://deq.nc.gov/news/hot-topics/genx-investigation>

We do have some limited volumes of un-concentrated water from August and a small amount from May. However nothing left from in between.

Mark

From: Gillespie, Andrew
Sent: Tuesday, September 12, 2017 3:35 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Ok thanks. Fire in the lab – sounds bad...

We'll need the list of sample availability before we go much further – will need to know what is available before we can refine a sample design. Sorry for the extra work but this is needed.

Attached is a spreadsheet I made to describe the collection of samples, can you have your team fill it out – edit as needed to make it right, I am assuming 13 sites x 8 sample dates, understand some cells may be empty. Need to know the number of replicates and the total sample volume **available** for each combination of site x date – ie what do we have that we could give to NCCT?

<< File: CFR sample availability.xlsx >>

Also if you can send an approximate map of sample sites, for planning and study design purposes, that would help. Don't need GPS coordinates, just a relative sense of where the samples were taken relative to the plant and the DW water treatment facility.

I will incorporate into the study plan and send an update with a suggested design for discussion. Will also clarify with NCCT whether 0.5 L to 0.5 ml is enough concentration – am I correct in assuming that there are no raw water samples available, all samples were concentrated 1000 times?

Thanks, Andy

From: Strynar, Mark
Sent: Tuesday, September 12, 2017 3:08 PM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>
Cc: McCord, James <mccord.james@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Yes sorry there must have been a fire I stopped to put out.

Mark

From: Gillespie, Andrew
Sent: Tuesday, September 12, 2017 2:03 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

Thanks Mark, couple of follow ups...

Ex. 5 Deliberative Process (DP)

Thanks, Andy

From: Strynar, Mark
Sent: Tuesday, September 12, 2017 12:56 PM
To: Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Houck, Keith <Houck.Keith@epa.gov>; Crofton, Kevin <Crofton.Kevin@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>
Subject: RE: potential PFAS bioassay project - cape Fear River

I had some comments on the document.

Mark
<< File: Study Plan Outline MJS comments.docx >>

From: Gillespie, Andrew
Sent: Monday, September 11, 2017 5:08 PM
To: Houck, Keith <Houck.Keith@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Crofton, Kevin <Crofton.Kevin@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>
Subject: potential PFAS bioassay project - cape Fear River

Colleagues – this is a follow up to a phone conversation I have had with most of you (sorry Keith, have not chatted with you yet) about a potential NERL/NCCT collaboration on bioassays of Cape Fear river water

Tim Buckley asked me to work with you all to facilitate the proposed bioassay collaboration. I know you are all busy and I do not want to impose any unnecessary structure, but some written study plan might be helpful particularly given the growing interest at the ORD level in this topic in general, and tox testing of PFAS in particular.

Attached is a first cut at what I think I know about the proposed project – an objective, list of players and roles, some background on the available samples, and some potential questions that could be addressed. And at the end a list of some of the issues I assume need to be addressed if they have not been already. Likely naive (since I am a forester and a statistician, not a chemical guy) but at least something to start with. Also attached is an overview of the Cape Fear river data.

<< File: Study Plan Outline.docx >> << File: NC DEQ nontargeted results f2f RTP report08282017.pdf >>

If someone already has developed something like this or better, please feel free to discard mine (and please share yours). Otherwise, if you (in particular Keith and Mark) could take some time and give me a quick reaction, corrections, elucidations, and any answers to the questions, that would help me communicate within ORD. If you just want to mark this draft up or send me other background, I would be happy to incorporate and start working to a concise study plan. If there is interest in some discussion, please let me and Kevin know and we can work to set something up.

Will share future iterations back to the group. Hope this is helpful, thanks, Andy